

In the Specification

Amend the following numbered paragraphs of the specification:

[0026] In reference to FIG. 3, the general data flow structure of packet switch module 14 according to the invention, is composed of a plurality of input bus like data bus in 13 respectively connected to the input ports of the switch and a plurality of output bus like data bus out 15 respectively connected to the output ports of the switch.

[0027] For each cross point such as the cross point defined by data bus in 13 and data bus out 15, there are an input control block 100, a memory block 200, an input expansion data block 300 and an output control block 400. Input control block 100 is common for all memory blocks which correspond to data bus in 13 and output control block 400 is common for all memory blocks which correspond to data bus out 15. Input expansion data block 300 is connected ~~in input~~ to input expansion bus 17 and is common to all memory blocks which correspond to data bus out 15. All the memory blocks corresponding to data bus in 13 are connected to a distributed data bus 50 itself connected to output expansion bus 18 by means of a gate 36. All the memory blocks corresponding to data bus out 15 are connected to output data bus 60 and to overflow data bus 70, the function of which will be explained later.

[0035] c) The third function of the header configuration and setting block 212 is to detect whether the packet is a multicast address packet. If so, the header of the packet has a specific configuration determining that all the following packets, which have all a specific header, are the packets of a multicast frame. In such a case, header configuration and setting block 212 analyzes also the 54 bytes of the packet following the header to determine whether the output port associated with the memory block corresponds to one of the output ports to which the multicast frame is addressed.

[0041] i) Overflow data bus 70 (one per output), is connected to all memory blocks, along internal output data bus 60 in order to reassign the overflow data packet to another memory block. For this, scheduler 500 activates signal 242 controlling overflow connection block 238 which can be an AND circuit connecting distributed data bus 50 to overflow data bus 70 through bus 240. Scheduler 500 takes the decision after receiving flow controls signals 236 from memories

connected on the same output port. The decision is to determine the usable memory wherein the overflow data packet can be stored. This is particularly useful, ~~due to the fact that~~ because the data packet is re-routed to another memory block of the same output port.

[0042] Input expansion data block 300 consists of header processing block 302, header validation block 308, expansion memory unit 312, and memory controller 314 as shown in FIG. 6. Input expansion bus in 17 connected to header processing block 302 carries the data packet coming from another switching module in expansion mode. Header processing block 302 is also connected ~~in~~ input to overflow data bus 70 for receiving an overflow data packet. Header processing module 302 is connected ~~in output~~ to header validation block 308 by data bus 306. The function of header processing block 302 is to select the appropriate data bus, according to the configuration mode line 320 from rank selector 800. This line carries the necessary module rank information.

[0046] The function of data selection block 402 is to receive internal output data bus 60, to validate the incoming data packet when receiving validation signal 206 coming from the scheduler 500, and to activate validation data signal 410 to memory controller 408.

[0047] Output memory unit 406 connected to data selection block 402 by data bus 404, stores incoming data packets under the control of memory controller 408. The function of the latter is to store the incoming data packets into the memory block 406, to release data packets from the output memory unit, to control the storing memory address, and to generate flow control signal 236 to scheduler 500.